

A New Alberta Coal Policy in the Age of Climate Change

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Executive Summary

A coal mine policy designed for the twenty-first century must recognize that climate change presents an urgent threat for present and future Albertans and that pathways to mitigate the worst harms associated with climate change leave no room for new coal mines or mine extensions in Alberta.

The Government of Alberta should exercise their jurisdiction to regulate greenhouse gases (GHGs) and put in place a legally binding coal policy that prohibits all new coal mines (thermal or metallurgical) and expansions of existing mines anywhere within the province of Alberta.

Climate Change – The Factual Backdrop

The Coal Policy Committee's Terms of Reference (ToR) state that the Government of Alberta is "seeking to develop a twenty-first century natural resource development policy – a coal policy – by Albertans and for Albertans". In so doing, the ToR reference the expectations of future generations. This reference is important. The now outdated 1976 Coal Policy that Alberta's modern coal policy will replace, was also designed to meet the needs of future generations. Built on the premise that "existing supplies of low cost energy – conventional crude oil and natural gas" were being depleted "firm steps had to be taken to ensure that new energy resource are found and developed to meet future domestic needs" which means we must "look for alternative fossil fuel resources" meaning "mineable deposits of oil sands and coal".¹ However, no development was to be permitted "unless the Government was satisfied that it may provide without irreparable harm to the environment",² with the Government committed to maintaining a balance between resource development and environmental protection in order to maintain a desirable quality of life for future Albertans.³ The Policy contains no reference to greenhouse gas emissions or climate change instead characterising Alberta coals as having "uniformly low sulphur content" and therefor constituting "a clean, low-polluting source of thermal energy."⁴

¹ A Coal Development Policy for Alberta, at <https://open.alberta.ca/dataset/cc40f8f5-a3f7-42ce-ad53-7521ef360b99/resource/802d6feb-04ae-4bcc-aac3-3b3be31a0476/download/1114651976coal-development-policy-for-alberta1976-06.pdf> at 2 (1976 Coal Policy).

² 1976 Coal Policy at 3.

³ 1976 Coal Policy at 5.

⁴ 1976 Coal Policy at 1.

Forty-five years on the factual backdrop is significantly different. As Wagner CJ stated in the Supreme Court of Canada *References re Greenhouse Gas Pollution Pricing Act* 2021 decision:⁵

Climate change is real. It is caused by greenhouse gas emissions resulting from human activities, and it poses a grave threat to humanity's future. The only way to address the threat of climate change is to reduce greenhouse gas emissions.

As Wagner CJ also acknowledged, failing to address the threat of climate change will have, and is already having, particularly severe and devastating impacts in Canada.⁶ These impacts - which include extreme weather events like floods and forest fires, degradation of soil and water resources, and increased frequency and severity of heat waves – will be born disproportionately by future generations in Alberta and beyond.

Impact of Climate Change Policies on Demand for Alberta's Coal

Seeking to hold warming to 1.5°C above pre-industrial levels to avoid the most extreme climate-related risks on human and natural systems,⁷ there is an increasing global focus on a net zero future. And, of course, the place of coal in a net zero future is tenuous at best. Coal is no longer viewed as a clean, low-polluting alternative source of energy. Indeed, the role of coal in a net zero future was brought into sharp focus in the recent International Energy Agency (IEA) Net Zero by 2050 special report.⁸ Beyond projects already committed as of 2021, the special report states:⁹

No new coal mines or extensions of existing ones are needed in the [Net Zero Emissions by 2050 Scenario (NZE)] as coal demand declines precipitously. Demand for coking coal falls at a slightly slower rate than for steam coal, but existing sources of production are sufficient to cover demand through to 2050.

In relation to coking (or metallurgical) coal, the IEA pathway foreshadows replacement of coal in steel making “based largely on a major shift from coal to electricity... driven by technologies such as scrap-based electric arc furnaces (EAF), hydrogen-based direct

⁵ 2021 SCC 11 at para 2.

⁶ Ibid at para 10.

⁷ IPCC, 2018: Summary for Policymakers. In: *Global Warming of 1.5°C. An IPCC Special Report on the impacts of global warming of 1.5°C above pre-industrial levels and related global greenhouse gas emission pathways, in the context of strengthening the global response to the threat of climate change, sustainable development, and efforts to eradicate poverty* [Masson-Delmotte, V., P. Zhai, H.-O. Pörtner, D. Roberts, J. Skea, P.R. Shukla, A. Pirani, W. Moufouma-Okia, C. Péan, R. Pidcock, S. Connors, J.B.R. Matthews, Y. Chen, X. Zhou, M.I. Gomis, E. Lonnoy, T. Maycock, M. Tignor, and T. Waterfield (eds.)]. *World Meteorological Organization, Geneva, Switzerland*, 32 pp.

⁸ International Energy Agency, Net Zero by 2050: A Roadmap for the Global Energy Sector, https://iea.blob.core.windows.net/assets/405543d2-054d-4cbd-9b89-d174831643a4/NetZeroBy2050-ARoadmapfortheGlobalEnergySector_CORR.pdf (hereinafter IEA).

⁹ IEA at 103 and Figure 4.1.

reduced iron (DRI) facilities, iron ore electrolysis and the electrification of ancillary equipment.”¹⁰

Despite this warning, the Committee has heard industry submissions that Alberta’s coal will remain in high demand and can be developed into the future.¹¹ However, as the Canada Energy Regulator recognized in its 2020 Canada Energy Futures report, demand for Alberta’s thermal and metallurgical coal depends on changing climate policies, both within Canada and coal importing countries.¹² And, as the Committee is no doubt aware, by 2030 all coal-fired electricity generation will be phased out in Canada. All thermal coal and the vast majority of metallurgical mined in Alberta would be intended for export. Significant shifts are already occurring in the climate policies of importing countries around the world. Many countries have established legally binding net zero targets.¹³ So too are the climate policies of countries importing products with embedded emissions associated with the combustion of coal. In this regard, the European Commission’s proposed Carbon Border Adjustment Mechanism (CBAM), which will cover imported iron and steel, is perhaps most notable.¹⁴ The mention in the communiqué related following the 9-10, July 2021 meeting of the G20 Finance Ministers of the need for international coordination on carbon pricing mechanisms is also an important development.¹⁵

The early phase-out of coal-fired generation capacity in our province offers Alberta first-hand experience with how quickly markets respond to clear regulatory frameworks, price signals, and opportunities for new technologies. As others have explored in more detail in their submissions, the demand-side economics of coal mining, will no doubt be consequentially affected in a carbon constrained future as markets and pricing mechanisms favour steel manufactured in plants using green hydrogen rather than metallurgical coal.¹⁶

¹⁰ IEA at 126.

¹¹ See: Coal Association of Canada, More protected lands, Strict regulation & oversight Greater transparency, June 18, 2021.

¹² Canada Energy Regulator, Canada’s Energy Future 2020, at <https://www.cer-rec.gc.ca/en/data-analysis/canada-energy-future/index.html>

¹³ UK, Sweden, France, Denmark, New Zealand, Hungary, Japan, South Korea, and Canada have all passed legislation with a net zero emissions reduction target on or before 2050. China has committed to net zero by 2060. On 14 July, 2021, the European Commission committed to becoming a climate-neutral continent by 2050.

¹⁴ Carbon Border Adjustment Mechanism: Questions and Answers, July 14, 2021, https://ec.europa.eu/commission/presscorner/detail/en/qanda_21_3661.

¹⁵ Italian G20 Presidency, Third Finance Ministers and Central Bank Governors meeting Communiqué 9-10 July 2021, <https://www.g20.org/wp-content/uploads/2021/07/Communique-Third-G20-FMCBG-meeting-9-10-July-2021.pdf>.

¹⁶ See: Dr. Ian Urquhart, Conservation Director, The Economics of Coking Coal Production in a Climate Change Constrained World, Alberta Wilderness Assn June 9, 2021.

Canada's Climate Commitments and Coal Policy in Alberta

There are several important climate change policy developments at the federal level that Alberta must consider in developing a new coal policy. The *Canadian Net-Zero Emissions Accountability Act*, which received royal assent on 29 June 2021, sets a national target of net zero emissions by at least 2050. The Act also sets Canada's existing nationally determined (NDC) target, as amended from time to time, as a legal 2030 target. This target will be updated to 40-45% below 2005 levels by 2030. The Act also requires additional targets be set for the "milestone years" of 2035, 2040, and 2045 at least 10 years ahead of each milestone year. In setting these targets, which must be progressively more ambitious, section 8 requires the best available scientific evidence and Indigenous knowledge to be taken into account. A greenhouse gas emissions reduction plan must be developed for each of these targets, with the 2030 to place within 6 months to include an interim objective for 2026.

This new legislation does not include any explicit requirements for provinces, nor seek to expressly bind the provinces in anyway. However, it does arguably create a link between the milestone targets and the Strategic Assessment on Climate Change Strategic Assessment on Climate Change (SACC)¹⁷ under the federal Impact Assessment Act (IAA). At present the SACC directs project proponents to submit a "credible plan" for how the project will achieve net-zero emissions by 2050, with that plan to "describe emissions reductions at specified intervals up to 2050." Presumably, proponents will therefore be expected to provide a plan that is consistent with the milestone targets¹⁸ and one might expect that the SACC will be updated to explicitly direct proponents to do so. In addition, the milestone targets established in the *Canadian Net Zero Emissions Accountability Act* will presumably become "commitments in respect of climate change" that must be taken into account in the assessment and decision-making phases of the new federal assessment regime (sections 22 and 63 of the IAA, respectively).¹⁹

The relevance of this new federal legislation and Canada's 2050 net zero commitment to new coal mines moving forward is foreshadowed in the Report of the Joint Review Panel (JRP) for the Benga Mining Limited Grassy Mountain Coal Project.²⁰ While the Grassy Mountain was assessed under the *Canadian Environmental Assessment Act* 2012 and the *Canadian Net-Zero Emissions Accountability Act* was not yet in force, the Panel did acknowledge that the project's emissions were not aligned with current

¹⁷ The Strategic Assessment of Climate Change, Revised October 2020, <https://www.canada.ca/en/services/environment/conservation/assessments/strategic-assessments/climate-change.html>.

¹⁸ David Wright, Bill C-12, *Canadian Net-Zero Emissions Accountability Act: A Preliminary Review*, ABLawg, November 23, 2020, <https://ablawg.ca/2020/11/23/bill-c-12-canadian-net-zero-emissions-accountability-act-a-preliminary-review/>.

¹⁹ David Wright, Bill C-12, *Canadian Net-Zero Emissions Accountability Act: A Preliminary Review*, ABLawg, November 23, 2020, <https://ablawg.ca/2020/11/23/bill-c-12-canadian-net-zero-emissions-accountability-act-a-preliminary-review/>.

²⁰ Report of the Joint Review Panel for the Benga Mining Limited Grassy Mountain Coal Project, June 17, 2021, <https://iaac-aeic.gc.ca/050/documents/p80101/139408E.pdf> (JRP).

federal climate change objectives.²¹ Ultimately, the Panel noted that the “project would pose a challenge to the Government of Canada’s objective to achieve net-zero emissions by the year 2050” but with “a detailed management or regulatory system not yet in place to achieve the objective, the development of policies and programs to meet Canada’s international greenhouse gas reduction commitments are beyond the scope.”²² Also missing in the Benga Coal assessment is consideration of “need for” the project, a factor that must be considered under s 22(d) of the *IAA*. Given the rapid shift to green hydrogen, this factor will also inject rigor into the assessment process. Taken together, these considerations will present a substantial hurdle to the approval of any new coal mine, or expansion of an existing coal mine, under the *IAA*.

Two very recent announcements add to the evolving policy in relation to the federal assessment of coal projects. The first, a Statement by the Government of Canada on Thermal Coal Mining issued on June 11, 2021, states that “the Government of Canada considers that any new thermal coal mining projects, or expansions of existing thermal coal mines in Canada, are likely to cause unacceptable environmental effects”.²³ This statement will be “an important consideration in the Minister’s or Governor in Council’s determination under the [*IAA*], as to whether the effects within federal jurisdiction caused by proposed new thermal coal mines or expansions of existing coal mines are in the public interest of Canadians”. It will also inform the “Minister’s use of the discretionary authority to designate any proposed new thermal coal project or expansion not otherwise listed in the *Physical Activities Regulations*”, and “the Minister’s opinion as to whether a designated project would cause unacceptable environmental effects within federal jurisdiction before the commencement of an assessment”.²⁴ In other words, the current federal government will not allow the approval of any new thermal coal mines, or the expansion of any existing thermal coal mine. This policy statement is based explicitly on the urgent need to “phase-out of coal-fired electricity generation is avoid a catastrophic increase in global temperatures”.²⁵ Importantly, in coming to this conclusion, this policy statement looks beyond direct (Scope 1) emissions associated with the mining of coal and indirect (Scope 2) emissions associated with purchased or acquired electricity consumed in the mining process and includes other indirect end-use (Scope 3) emissions associated with the combustion of the coal, regardless of where these emissions occur. This is an important change in the federal approach, with the SACC still focused on Scope 1 and Scope 2 emissions.

²¹ JRP at [567].

²² JRP at [569].

²³ Government of Canada, Statement by the Government of Canada on thermal coal mining, June 11, 2021, <https://www.canada.ca/en/environment-climate-change/services/managing-pollution/energy-production/electricity-generation/statement-government-canada-thermal-coal-mining.html>.

²⁴ Government of Canada, Statement by the Government of Canada on thermal coal mining, June 11, 2021, <https://www.canada.ca/en/environment-climate-change/services/managing-pollution/energy-production/electricity-generation/statement-government-canada-thermal-coal-mining.html>.

²⁵ Government of Canada, Statement by the Government of Canada on thermal coal mining, June 11, 2021, <https://www.canada.ca/en/environment-climate-change/services/managing-pollution/energy-production/electricity-generation/statement-government-canada-thermal-coal-mining.html>.

On June 16, the federal Minister for Environment and Climate Change announced, in an open letter to Heather McPherson MP, his intention to designate any new metallurgical coal mine or the expansion of an existing coal mine that has the potential to release selenium into water bodies.²⁶ While the intention to designate is focused on the impacts of selenium pollution on fish, any new metallurgical coal mine will need to provide a plan demonstrating how consistency with the milestone targets and Canada's net-zero objective.

A New Alberta Coal Policy in the Age of Climate Change

Against the factual backdrop of climate change, and Canada's evolving climate commitments, the question remains as to what a "twenty-first century" coal policy designed to meet the needs of current and future generations of Albertans should say about the development of Alberta's coal resources.

It is again worth highlighting that the difference in context between now and 1976. Alberta is not looking for a new energy source to meet domestic demand. Coal is not an alternative resource that is considered a clean, low-polluting source of energy. The factors that remain the same are those that should guide any responsible government: no development should be permitted unless the Government is satisfied that it will not cause irreparable harm to the environment, and the Government must remain committed to maintaining a balance between resource development and environmental protection in order to maintain a desirable quality of life for future Albertans.

Many submissions have focused on watershed protection and ecosystem function as the highest priority throughout the Eastern Slopes.²⁷ The sensitivity of the receiving environment in the Eastern Slopes and its importance to Albertans unequivocally supports the conclusion that a new coal policy should prohibit all new surface coal mines and the expansion of existing mines in this area.

However, a coal policy designed for the twenty-first century must go further and consider the climate change impacts associated with mining coal. This must include consideration of Scope 1, Scope 2 and Scope 3 emissions. To ignore Scope 3 emissions is to ignore the science of climate change; ignore that the impact of emissions will be felt by Albertans regardless of where the end use combustion occurs. A twenty-first century coal policy must also notion that because climate change is "an inherently global problem", or that GHG emissions from mining coal will cause no "measurable harm" or not have tangible impacts on Alberta. Wagner CJ rejected this notion in the Supreme Court of Canada *References re Greenhouse Gas Pollution Pricing Act 2021* majority decision and went on to state:²⁸

²⁶ Government of Canada, Open Letter, Heather McPherson MP, June 16, 2021, <https://iaac-aeic.gc.ca/050/evaluations/document/139435>.

²⁷ See in particular Rainer Knopff, Harvey Locke, Ted Morton and Kevin Van Tighem, Coal and the Public Interest in Alberta, June 29, 2021.

²⁸ 2021 SCC 11 at para 188.

Each province's emissions are clearly measurable and contribute to climate change. The underlying logic of this argument would apply equally to all individual sources of emissions everywhere, so it must fail.

At a time when GHG emissions must fall dramatically to avoid the most extreme consequences of climate change, an Alberta Coal Policy that meets the needs of Albertans, and particularly future generations of Albertans must recognize that the Southern Slopes are not only the wrong place for coal mining, it is simply the wrong time for a coal policy that does anything but prohibits the mining of Alberta's coal resource. In the words of the NSW Land and Environment Court, considering a proposal for an open cut coal mine in the Gloucester valley, it is the "[w]rong time because the GHG emissions of the coal mine and its coal product will increase global total concentrations of GHGs at a time when what is now urgently needed, in order to meet generally agreed climate targets, is a rapid and deep decrease in GHG emissions. These dire consequences should be avoided."²⁹

The alternative is to defer to the federal government and all it, through evolving policy and the *IAA* processes to consider climate change impacts on behalf of Albertans. At the least this should mean the Albertan coal policy would (i) prohibit all new thermal coal mines and expansions of existing thermal coal mines anywhere within the province, and (ii) recognize that all new metallurgical coal mines and expansions of existing mines would be subject to a rigorous analysis to assess need, market demand, and consistency with Canada's net zero commitments.

However, given the SCC's affirmation in the *References re Greenhouse Gas Pollution Pricing Act 2021* decision that the provinces retain jurisdiction in relation to "non-carbon pricing forms of GHG regulation" and Alberta's assertion that it is using its power to actively mitigate climate change,³⁰ Albertans justifiably expect their government to exercise their power to mitigate climate change in the best interests of their citizens. That is to have the courage to recognize that the world has changed considerable since 1976 and an Alberta Coal Policy for the twenty-first recognizes, given the climate change imperative, that Alberta is the wrong place, and this is the wrong time, for new coal mining.

²⁹ *Gloucester Resources Limited v. Minister for Planning*, [2019] NSWLEC 7 at [699].

³⁰ 2021 SCC 11 at paras 191 and 192.